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FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
Claiborne County Schools

Prepared By:
Tommy Walker

Time Period Covered by This Plan:
2012 - 2021

Date Plan Prepared:
2012-02-16

Plan Type:
Stewardship / Stewardship

This plan was developed in accordance with the rules of the Stewardship program.

Property Name: Section 4-T12N-R2E

MISSISSIPPI FOREST STEWARDSHIP PROGRAM

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LANDOWNER INFORMATION

Name:	Claiborne County Schools	
Mailing Address:	P.O. Box 337	
City, State, Zip:	Port Gibson, MS 39150	
Country:	United States of America	
Contact Numbers:	Home Number:	601-437-4352
	Office Number:	
	Fax Number:	
E-mail Address:		
Social Security Number (optional):		

FORESTER INFORMATION

Name:	Tommy Walker , Forester II	
Forester Number:	01473	
Street Address:	P.O. Box 77	
City, State, Zip:	Vicksburg, MS 39181	
Contact Numbers:	Office Number:	601-638-1227
	Fax Number:	
E-mail Address:		

PROPERTY LOCATION

County:	Claiborne	Total Acres:	617	Latitude:	-91.02	Longitude:	32.04
Section:	4	Township:	12N	Range:	2E		

DISCLAIMER

This plan is intended to be flexible. It may be modified to meet changes in economic conditions, management goals, or other circumstances. The figures in this plan are only estimates. They can and will change. Therefore, any plans or budgets that use these figures should be tempered with that thought.

INTRODUCTION

This Forest Stewardship Management Plan will serve as a guide for accomplishing the goals and objectives for your property. In addition to addressing your specific goals and objectives, this plan includes recommendations for maintaining soil and water quality and protecting your forest from insects, disease, and wildfire. Recommendations are based on observation and assessment of the site.

OBJECTIVES

Timber Production

The goal is to produce high quality sawtimber. This will be accomplished through reforestation and timber stand improvement practices such as herbicide applications, prescribed burning, thinning at specified intervals, and other silvicultural practices.

Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Wildlife Management - General
The goal is to provide a diversity of habitats suitable for a variety of game and non-game wildlife species. Habitat management will focus on developing a variety of food, cover, water, and space. This will be accomplished by establishing and maintaining access roads and firelanes, providing openings within the forest, and the management of trees located within Streamside Management Zones.

PROPERTY DESCRIPTION

General Property Information
This section is located approximately 1.5 miles east of Grand Gulf in the northwest part of the county. It is commonly known as the Grand Gulf section. This section contains approximately 617 acres of land of which, 602 acres is forest land. The 15 acres of nonforest land consists of a powerline. The primary access roads are private woods roads on adjacent landowners, behind locked gates. The access for the east side and the north side are across Anderson Tully.
The terrain on this section is very steep. The timber type is primarily Bluff Hardwood and Scattered Pine. This section is part of the loess bluff hills. Therefore, the soils are highly productive and highly erodible.

Water Resources
This section has several perennial streams, intermittent streams, and drains running throughout the property. All water resources will be managed in accordance with Mississippi's Best Management Practices.

Timber Production
The goal is to maximize the production of high quality timber. This will be accomplished through the application of timely thinning and other silvicultural practices designed to enhance timber quality and growth. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Threatened and Endangered Species
No threatened and endangered species were identified during the reconnaissance and evaluation of your property.

Interaction with Surrounding Property
Prescribed practices should be carried out in a manner that will minimize adverse impacts on surrounding properties. Consideration should be given to potential air, water, visual, and other impacts. In addition, practices carried out should have positive effects on the surrounding community such as improved wildlife habitat and soil stabilization.

Soils General

Soils were evaluated on the property to determine the suitability of the site for the proposed activities. Forest practices were planned so as to minimize erosion or other adverse effects on the soil. The following soils are identified for this property: Memphis, Natchez, and Adler silt loams are the primary soils on this property located in the Loess Bluff Hills. These soils are very productive sites for both hardwood and Loblolly Pine. The Cherrybark Oak site index is over 100' and the Loblolly Pine site index is near 95'. The primary tree species for this tract are Cherrybark Oak, Shumard Oak, Water Oak, White Oak, Yellow Poplar,Green Ash, and Loblolly Pine.

Archeological and Cultural Resources

These areas can range from churches, old cemeteries, natural springs, Indian mounds to home sites or other areas of historical significance. No areas of historical significance were found on this tract.

GENERAL PROPERTY RECOMMENDATIONS

Forest Protection

A healthy, vigorously growing stand is the best defense to an attack from a variety of forest insects, plants and pathogens.

Insects and Diseases

Trees are subject to attack from insects and diseases. Different insects and diseases affect trees according to the age, species, and condition of the trees. Planted stands of pines and pure stands of hardwoods are particularly susceptible to attack. Since there are many different insects and diseases, no attempt will be made here to explain all of them. The property should be inspected at least annually for possible signs of insect and disease activity. Some things to look for are:

- Unseasonable leaf fall
- Discoloration of leaves or needles
- Pitch pockets on pine trees
- Heavy defoliation of hardwood leaves
- Groups of three or more dying trees within a stand

This list does not cover all instances of insect or disease attacks. If anything unusual is noticed, report it to a forester. In most cases, insect and disease problems can be controlled if discovered early.

Fire Protection

Your forest should be protected from wildfire at all times. The best way to protect your investment is by establishing and maintaining firebreaks around the property. Guidelines for establishment and maintenance of firebreaks may be found in Mississippi Forestry Commission publication #107, *Mississippi's Best Management Practices.*

Grazing

Tree seedlings should be protected from grazing until such time as the terminal bud of the sapling is beyond reach of livestock. Domestic livestock should be denied access to all tree planting areas.

Boundary Lines

The Mississippi Forestry Commission has been maintaining the property boundaries on this section on a routine basis for many years. The property boundaries will be painted orange on a 6 year rotation, beginning in 2012.

Water Quality Protection

The objective of the landowner is to protect, preserve and enhance all water sources on or transecting the property. This can best be achieved by implementation of Best Management Practices in all aspects of the management of the property.

Aesthetics

This tract is in a rural part of the county. Therefore, aesthetics should not be a high priority.

Ecological Restoration

Ecological restoration is the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed. A reconnaissance of the property has been conducted and no ecological restoration activities are recommended at this time.

Wildlife Mgt. Target Species

The objective of this practice is to provide habitat best suited for the featured or target species. Habitat management can focus on providing food, cover, water, and space to facilitate the target species.

Environmental Education

Environmental educational goals can be to provide educational opportunities for children and adults through the development of items such as nature trails with tree identification markers, wildlife viewing areas, picnic areas, parking, public restroom facilities. There are no current plans to develop any of these items on this section.

Wildlife Management General

The goal is to provide a diversity of habitats suited for a variety of game and non-game wildlife species. Habitat management will focus on providing a variety of food, cover, water, and space. This will be accomplished, in part, by establishing and maintaining access roads and firelanes, providing openings within the forest, and leaving streamside management zones (SMZs).

This section currently has 61 acres of SMZs. Also, wildlife is considered when determining the size and placement of regeneration harvests. Timber loading areas often make good areas for wildlife food plots. There are approximately 2 acres of wildlife food plots currently being maintained by the leaseholder.

Timber Management
Timber management goals for this property are to manage timber resources in such a manner as to maximize timber production on a sustained yield basis.

Recreation
The primary recreational use of this property is to generate income through a hunting lease.

SOIL TYPES

Memphis
The Memphis component makes up 60 percent of the map unit. Slopes are 17 to 40 percent. This component is on uplands. The parent material consists of loess deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. The Natchez component makes up 30 percent of the map unit. Slopes are 17 to 40 percent. This component is on hillslopes. The parent material consists of loess deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Adler
The Adler component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during January, February, March, April. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

STRATA

Strata 1
Strata Description

Strata 1 is comprised of Stand 10. It contains a total of 66 acres of two-aged bluff hardwood sawtimber. This stand was thinned about 10 years ago. Much of the timber is mature. The species composition is good and the volume per acre is fair. Once this strata

has been harvested, there is a high potential for problems with black locust and cane. The terrain is steep to very steep.

Strata Recommendations

The long term goal for this strata is to clearcut and regenerate it as mixed pine/hardwood.

Activity Recommendations

In 2012, Strata 1 should be clearcut and regenerated along with a thinning in Strata 2, Stands 2, 7, and 9 and Strata 4. The total sale area will be 279 acres.

In 2013-2014, Strata 1 should be chemically site prepared and handplanted with geneticly improved Loblolly Pine to establish a mixed pine/hardwood stand. The chemical and rate used should be one that controls black locust and cane and does not harm oak regeneration. The pine should be planted at a rate of 302-435 trees/acre. The advanced natural hardwood regeneration should be sufficient for the hardwood component.

The target date for planting is the winter of 2013-14. However, this could change due to the timing of the completion of harvesting. A survival check will be conducted during the following fall/winter to ensure adequate stocking.

Strata 2

Strata Description

Strata 2 is comprised of Stands 1, 2, 7, 8, and 9. It contains a total of 339 acres of bluff hardwood sawtimber. Much of the timber is near maturity. The species composition is good and the volume per acre is good. The terrain is steep to very steep.

Strata Recommendations

The long term goal for this strata is to selectively thin it and then to clearcut and regenerate it over the next 15-20 years.

Activity Recommendations

In 2012, Strata 1 should be clearcut and regenerated along with a thinning in Strata 2, Stands 2, 7, and 9 and Strata 4. The total sale area will be 279 acres. This thinning will be a crown thinning. The trees to remove are as follows: trees of undesirable species, poor quality and unhealthy trees of desirable species, and high risk trees which are competing with better trees. At least 50% crown cover should be left in all streamside management zones.

In 2014, Strata 2, Stand 1 should be clearcut and regenerated along with a thinning in Strata 2, Stand 8 and Strata 4. The total clearcut acreage should be 68 acres and the total thinning acreage should be 97 acres. The trees to remove in the thinning are as follows: trees of undesirable species, poor quality and unhealthy trees of desirable species, and

high risk trees which are competing with better trees. At least 50% crown cover should be left in all streamside management zones.

In 2016, Strata 2, Stand 1 should be chemically site prepared and handplanted with geneticly improved Loblolly Pine to establish a mixed pine/hardwood stand. The chemical and rate used should be one that controls black locust and cane and does not harm oak regeneration. The pine should be planted at a rate of 302-435 trees/acre. The advanced natural hardwood regeneration should be sufficient for the hardwood component.

The target date for planting is the winter of 2015-16. However, this could change due to the timing of the completion of harvesting. A survival check will be conducted during the following fall/winter to ensure adequate stocking.

In 2016, Strata 2, Stand 9 should be clearcut and regenerated. The total sale area will be 73 acres.

In 2018, Strata 2, Stand 9 should be chemically site prepared and handplanted with geneticly improved Loblolly Pine to establish a mixed pine/hardwood stand. The chemical and rate used should be one that controls black locust and cane and does not harm oak regeneration. The pine should be planted at a rate of 302-435 trees/acre. The advanced natural hardwood regeneration should be sufficient for the hardwood component.

The target date for planting is the winter of 2017-18. However, this could change due to the timing of the completion of harvesting. A survival check will be conducted during the following fall/winter to ensure adequate stocking.

Strata 3

Strata Description

Strata 3 is comprised of Stands 4, 5, and 6. It contains a total of 136 acres of fresh clearcut. Some desirable natural hardwood regeneration exists. However, much cane and black locust exists too.

Strata Recommendations

The long term goal for this strata is to perform site preparation and plant geneticly improved Loblolly Pine for a mixed pine/hardwood stand.

Activity Recommendations

In 2012, Strata 3 should be chemically site prepared and handplanted with geneticly improved Loblolly Pine to establish a mixed pine/hardwood stand. The chemical and rate used should be one that controls black locust and cane and does not harm oak regeneration. The pine should be planted at a rate of 302 (12'x12' spacing)-435 trees/acre (10'x10' spacing). The existing natural hardwood regeneration should be sufficient for the hardwood component.

A survival check will be conducted during the following fall/winter to ensure adequate stocking.

No other activities should be needed in this strata during the life of this plan.

Strata 4

Strata Description

Strata 4 is comprised of Stand 11. It contains 61 acres of two-aged bluff hardwood sawtimber. This strata lies adjacent to perennial streams and is being used as a streamside management zone. Much of the timber is near maturity. The species composition is good. The volume per acre is fair. The terrain is flat along the primary streams to steep along some of the minor gullies.

Strata Recommendations

The long term goal for this strata is to clearcut and regenerate all of this strata that is not needed as a Streamside Management Zone as adjacent stands are harvested over the next 15 years. The areas that are being maintained as SMZs can be thinned as adjacent stands are harvested.

Activity Recommendations

2012, Strata 1 should be clearcut and regenerated along with a crown thinning in Strata 2, Stands 2, 7, and 9 and Strata 4. The total sale area will be 279 acres. At least 50% crown cover should be left in all streamside management zones.

In 2014, Strata 2, Stand 1 should be clearcut and regenerated along with a crown thinning in Strata 2, Stand 8 and Strata 4. The total sale area will be 165 acres. At least 50% crown cover should be left in all streamside management zones.

OTHER PLAN ACTIVITIES

Boundary Lines

Line Description

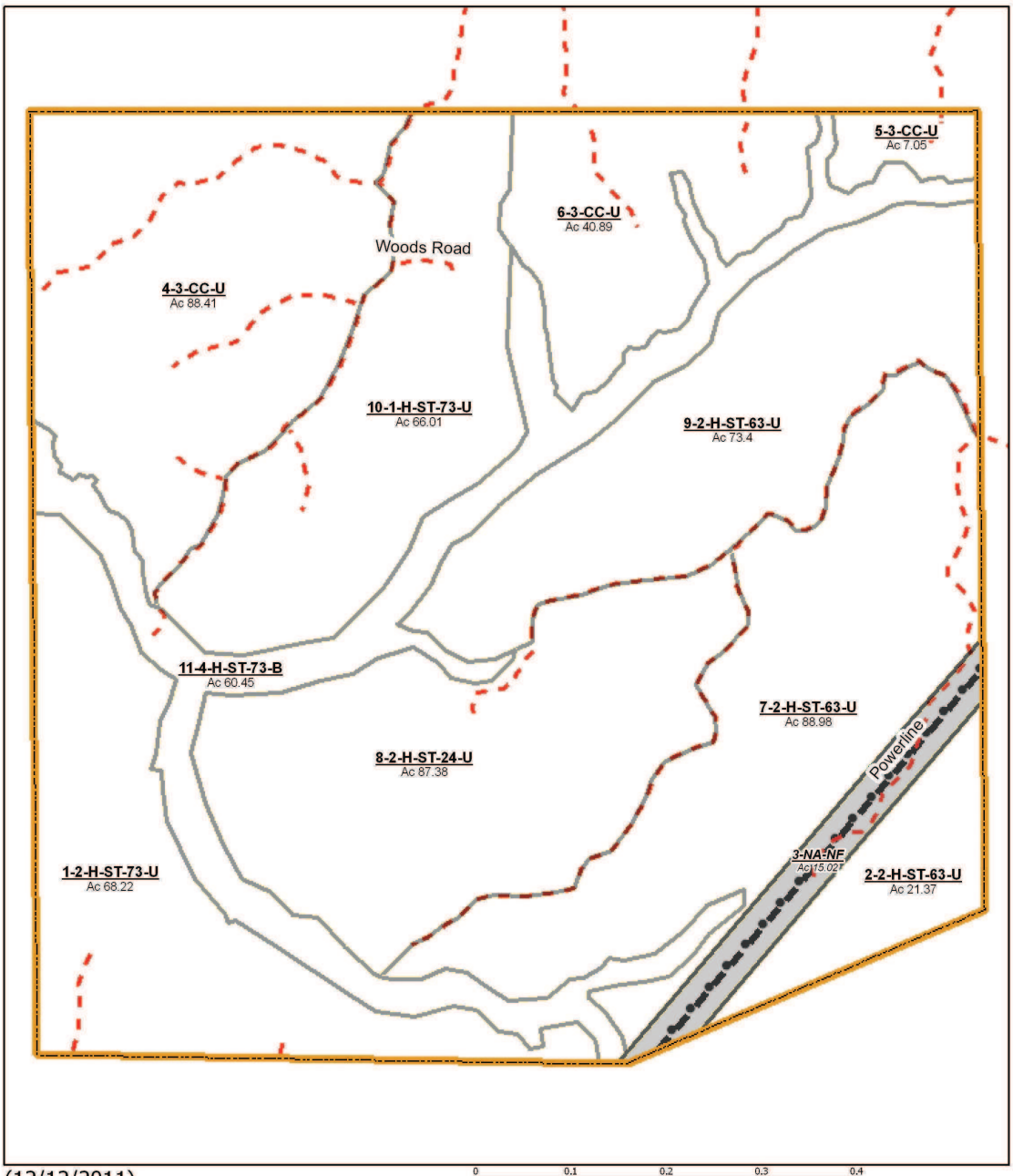
This section has 4 miles of boundary lines and around 3.5 miles of woods roads to maintain.

Line Recommendations

The property boundaries will be painted on a 6 year rotation beginning in 2012. The woods roads will be maintained as firebreaks on an "As Needed" basis.

STAND MAP - FY2012

Claiborne County Schools
Section 4, T12N, R2E, Claiborne County, Ms.
617.19 Acres



(12/12/2011)

Prepared by: Tommy Walker

LEGEND for Section 4, T12N, R2E, Claiborne County, Ms.

Property
- Property

Category 1: Stands
- Clear Cut
- Non-Stocked
- Reproduction
- Sub-Merchantable
- Pulpwood
- Chip-n-Saw
- Sawtimber
- Poles

Category 3: Non-Forest Stands
- Non-Forest

Property Roads/Trails
- Drive Ways
- Access Road
- Logging Road
- Skid Trail
- Farm Road
- Hiking Trail
- Horseback Riding Trail

Utilities (Lines)
- Large Electrical
- Local Utility
- Large Pipeline
- Small Pipeline
- Gas Line
- Utility Line
- Water Line

Stand Activity Summary for
CLAIBORNE COUNTY SCHOOLS
4 12N 2E

Filters Applied:
County: Claiborne
Client Class: School Trust Land
District: Capital District
Client: CLAIBORNE COUNTY S
STR: 4 12N 2E
Activity:
Year: 2012 Through 2021

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2012						
4 12N 2E	1	10	Harvest, Mechanical, Final, Machine, Misc Hardwood	66	$1,980.00	$56,430.00
4 12N 2E	2	2	Harvest, Mechanical, Thin, Machine, Misc Hardwood	21	$840.00	$12,201.00
4 12N 2E	2	7	Harvest, Mechanical, Thin, Machine, Misc Hardwood	89	$3,560.00	$60,609.00
4 12N 2E	2	9	Harvest, Mechanical, Thin, Machine, Misc Hardwood	73	$2,920.00	$42,413.00
4 12N 2E	3	4	Site Preparation, Chemical, Broadcast, Aerial, Combination	88	$5,280.00	$0.00
4 12N 2E	3	4	Regeneration, Artificial, Plant, Hand, Loblolly	88	$7,480.00	$0.00
4 12N 2E	3	5	Site Preparation, Chemical, Broadcast, Aerial, Combination	7	$420.00	$0.00
4 12N 2E	3	5	Regeneration, Artificial, Plant, Hand, Loblolly	7	$595.00	$0.00
4 12N 2E	3	6	Site Preparation, Chemical, Broadcast, Aerial, Combination	41	$2,460.00	$0.00
4 12N 2E	3	6	Regeneration, Artificial, Plant, Hand, Loblolly	41	$3,485.00	$0.00
4 12N 2E	4	11	Harvest, Mechanical, Thin, Machine, Misc Hardwood	30	$1,200.00	$12,750.00
			Yearly Totals	551	$30,220.00	$184,403.00
2014						
4 12N 2E	1	10	Site Preparation, Chemical, Broadcast, Aerial, Combination	66	$3,960.00	$0.00
4 12N 2E	1	10	Regeneration, Artificial, Plant, Hand, Loblolly	66	$5,610.00	$0.00
4 12N 2E	2	1	Harvest, Mechanical, Final, Machine, Misc Hardwood	68	$2,380.00	$65,960.00
4 12N 2E	2	8	Harvest, Mechanical, Thin, Machine, Misc Hardwood	87	$3,045.00	$29,145.00
4 12N 2E	4	11	Harvest, Mechanical, Thin, Machine, Misc Hardwood	10	$350.00	$4,250.00

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
			Yearly Totals	297	$15,345.00	$99,355.00
2016						
4 12N 2E	2	1	Regeneration, Artificial, Plant, Hand, Loblolly	68	$5,780.00	$0.00
4 12N 2E	2	1	Site Preparation, Chemical, Broadcast, Aerial, Combination	68	$4,080.00	$0.00
4 12N 2E	2	9	Harvest, Mechanical, Final, Machine, Misc Hardwood	73	$2,555.00	$50,735.00
			Yearly Totals	209	$12,415.00	$50,735.00
2018						
4 12N 2E	2	9	Site Preparation, Chemical, Broadcast, Aerial, Combination	73	$4,380.00	$0.00
4 12N 2E	2	9	Regeneration, Artificial, Plant, Hand, Loblolly	73	$6,205.00	$0.00
			Yearly Totals	146	$10,585.00	$0.00
			Grand Totals	**1,203**	**$68,565.00**	**$334,493.00**